DOCUMENT RESUME

ED 425 696 HE 031 746

AUTHOR	Cunningham, Alisa Federico; O'Brien, Colleen
TITLE	Do Grants Matter? Student Grant Aid & College Affordability.
INSTITUTION	Education Resources Inst., Boston, MA.; Institute for Higher Education Policy, Washington, DC.
PUB DATE	1998-11-00
NOTE	39p.
AVAILABLE FROM	The Education Resources Institute, 330 Stuart St., Suite 500, Boston, MA 02116-5237; Tel: 800-255-TERI, ext. 4762 (Toll-Free); Fax: 617-451-9425; Web site: http://www.teri.org (free).
PUB TYPE	Reports - Evaluative (142)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Educational Finance; Financial Needs; Financial Support; Government Role; *Grants; Higher Education; Need Analysis (Student Financial Aid); Paying for College; *Student Financial Aid; Trend Analysis
IDENTIFIERS	*Affordability

ABSTRACT

This report examines the relationship between grant assistance and overall college affordability by analyzing data, spanning two decades, from the U.S. Department of Education, the College Board, and other higher education organizations. It identifies the following key trends: (1) need-based grant awards are covering a decreasing percentage of the average price of attending college; (2) net prices have increased for most families in the 1990s, further indicating that the role of grant aid in keeping college affordable has been diminished; and (3) these trends have occurred despite the fact that need-based grant aid continues to be targeted toward students with "need." These trends are explained by the following additional findings: the total price of attending college has escalated in recent years; grants, especially at the federal level, have remained static as a proportion of all student aid awarded; and in the 1990s, the proportion of students receiving loans and the average loan amounts have grown faster than both the proportion of students receiving grants and the average grant amount. The paper urges greater financial support for grant aid at federal, state, and institutional levels. (Contains 27 references.) (DB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

HE

ED 425 696

DO GRANTS MATTER?

Student Grant Aid

&

College Affordability

BEST COPY AVAILABLE

HE 031 746

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Institute for Higher Education Policy

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

TERI
The Education Resources Institute
THE INSTITUTE
For Higher Education Policy

DO GRANTS MATTER?

Student Grant Aid & Affordability

NOVEMBER 1998

TERI
The Education Resources Institute
THE INSTITUTE
For Higher Education Policy

The Education Resources Institute, Inc. (TERI), incorporated in June 1985, is a national not-for-profit organization that aids students in attaining an education and assisting educational institutions in providing an education in an economical fashion. To achieve this purpose, TERI functions as a private guarantor of student loans and engages in a variety of education policy and research activities.

TERI's Higher Education Information Center (HEIC) division provides information at no cost to students and their families about financial aid for post-high school education and career opportunities. The Center is located at the Boston Public Library and assists over 100,000 individuals a year.

Ernest T. Freeman, President and CEO, TERI
Thomas D. Parker, President, Boston Systems Resources, Inc.

To request a copy of the report, please contact:
The Education Resources Institute
330 Stuart Street, Suite 500 Boston, MA 02116-5237
Phone: 800-255-TERI, Ext. 4762/ Facsimile: 617-451-9425/ Internet: http://www.teri.org

The Institute for Higher Education Policy is a non-profit, non-partisan organization whose mission is to foster access to and quality in postsecondary education. The Institute's activities are designed to promote innovative solutions to the important and complex issues facing higher education. These activities include research and policy analysis, policy formulation, program evaluation, strategic planning and implementation, and seminars and colloquia.

Jamie P. Merisotis, President
Colleen T. O'Brien, Managing Director
Katheryn Volle Harrison, Research Analyst
Alisa Federico Cunningham, Research Analyst
Christina Redmond, Project Assistant
Mark P. Harvey, Project Assistant

For further information, please contact:
THE INSTITUTE for Higher Education Policy
1320 19th Street, NW, Suite 400 Washington, DC 20036
Phone: 202-861-8223/ Facsimile: 202-861-9307/ Internet: http://www.ihep.com

Previous policy reports published by TERI and The Institute include: *Credit Risk or Credit Worthy? College Students and Credit Cards; Missed Opportunities: A New Look at Disadvantaged College Aspirants; Now What? Life After College for Recent Graduates; Taxing Matters: College Aid, Tax Policy, and Equal Opportunity; Life After 40: A New Portrait of Today's—and Tomorrow's—Postsecondary Students; Graduating Into Debt: The Burdens of Borrowing for Graduate and Professional Students; College Debt and the American Family;* and *The Next Step: Student Aid for Student Success.* Copies of these reports can be obtained from TERI at 800-255-TERI, Ext. 4762.

Table of Contents

Executive Summary v

Introduction 1

Changing Effects of Grant Aid on Affordability 6

What Explains These Trends? 16

Implications and Conclusions 24

References 27

Acknowledgments

This report was prepared by Alisa Federico Cunningham, Research Analyst, and Colleen O'Brien, Managing Director, at The Institute for Higher Education Policy. Jamie Merisotis, Thomas Wolanin, and Katheryn Volle Harrison at The Institute, as well as Ted Freeman and Tom Parker at TERI, provided writing and editorial assistance.

In addition, The Institute and TERI would like to acknowledge the individuals and organizations who offered information, advice, and feedback for the report. In particular, we would like to thank: Ken Redd, Sallie Mae Education Institute; Free Hand Press; The Printer; and Gil Kline, Strategic Communications.

We heartily acknowledge the help of these individuals and organizations and recognize that they are not responsible for any errors of omission or interpretation contained herein.

Executive Summary

The late 1990s are a time of unprecedented enthusiasm and opportunity for Americans hoping to pursue a college education. This optimism is reflected in the enrollment decisions of students, the opinions of the general public, and the actions of policymakers. With these recent signs of progress, it would seem reasonable to conclude that American students and their families now face the best of all worlds. But these signs of optimism mask longer-term trends that could pose serious problems for college access and success in the near future: tuition and fees increases that are outpacing growth in family incomes and inflation; wide disparities in access to postsecondary education among students from different family income levels; and a rising perception that college is too expensive. Common among these trends is the persistent concern about the overall affordability of a college education. All of these factors indicate that the question of affordability—whether the amount of money students and their families actually pay to attend college is within their reach—needs to be reexamined.

While increases in tuition and decreases in funding for student aid programs have an impact on affordability, it is the overall effect that these trends have on students that matters most. This is particularly true for lower-income students, who have limited personal resources and often do not have access to other private sources of assistance. For them, being able to afford a college education is heavily influenced by the availability of student aid—particularly grant aid.

This report reexamines the relationship between grant assistance and overall college affordability. Produced by The Institute for Higher Education Policy and The Education Resources Institute (TERI), *Do Grants Matter? Student Grant Aid and College Affordability* chronicles the trends in funding for grants and their impact on families' ability to pay for postsecondary education. Data analyzed in this report span the past

two decades and include information from the following sources: the U.S. Department of Education, including budget information and national data sets maintained by the Department; the College Board, which annually collects data on trends in student aid funding; and other higher education organizations. In this report, grants are defined as forms of student aid that are non-repayable and are not tied to service or employment.

Major Findings

Over the two decades between 1976-77 and 1996-97, the capacity of grant aid to improve the affordability of higher education gradually was eroded, especially for students from low-income families attending four-year institutions. This is evidenced by several key trends:

Need-based grant awards are covering a decreasing percentage of the average price of attending college.

Students receive grants from three major sources: the federal government, primarily in the form of Pell Grants; states, which have a variety of grant aid programs; and colleges and universities themselves, which use tuition, endowment, and other resources to aid their students. In 1976-77, the *maximum* Pell Grant award of $1,400 covered 35% of the average price of attending a private institution and 72% of the average price of attending a public institution. Since the early 1980s, however, the percentages have declined. The maximum award of $2,470 in 1996-97 covered only 13% of the average price at private institutions and 34% at public institutions. Similar trends hold for the *average* Pell Grant amount received by recipients: in 1976-77, the average award of $759 covered 19% of the average price at private four-year institutions and 39% at public four-year institutions, but by 1996-97, the average award of $1,577 covered 9% and 22%, respectively.

State need-based grant aid also is covering a decreased percentage of the cost of education. In 1976-77, the average state need-based undergraduate grant award of $590 covered approximately 30% of average public four-year prices; by 1995-96, this figure had fallen to 22% despite the fact that the average award had risen to $1,560.

Average institutional grant awards have remained stable over the last decade as a proportion of the average price of attending four-year institutions. In 1989-90, the average need-based grant of $1,843 covered approximately 15% of the average tuition and fees at private four-year institutions and 37% of the average tuition at public four-year schools. These figures increased slightly by 1992-93, but fell back to approximately the 1989-90 levels by 1995-96.

Net prices have increased for most families in the 1990s, further indicating that the role of grant aid in keeping college affordable has been diminished.

Net prices—the total price of attendance minus all grant aid—increased between 1989-90 and 1995-96 for most families. For example, the average net price of attending a public four-year institution for undergraduates with family incomes of $20,000 to $39,999 increased from $6,140 in 1989-90 to $7,829 in 1995-96—an increase of 28%, or 5% when inflation is considered. It appears that net prices are rising most rapidly for students from the poorest families.

At each type of institution, net prices are still lower for low-income students. In fact, net prices at public two-year institutions actually decreased for the two lowest income groups. However, data from 1995-96 indicate that net prices are significantly higher than average estimated family contributions (EFCs) for almost all income categories and institutional types. This was true for all full-time, dependent undergraduates from the lower family income categories (less than $40,000), regardless of the type of institution they attended.

These trends have occurred despite the fact that need-based grant aid continues to be targeted toward students with "need."

The average amount of need-based grant aid received by full-time, dependent undergraduates from all sources—including federal, state, and institutional—varies by family income and institutional type. In 1995-96, average need-based grant aid amounts from all sources tended to be highest at private four-year institutions and lowest at public two-year institutions, a result of the variation in average price by institutional type. Average need-based grants covered similar proportions of the average price of attendance across most institutional types: 30% at public two-year institutions, 29% at private four-year institutions, and 27% at public four-year institutions.

Within each institutional type, average need-based grant amounts tended to vary inversely with family income: the lower the income level, the higher the average award amount. In general, average grant aid awards received by full-time, dependent undergraduates covered a larger proportion of total price of attendance for lower-income students than for higher-income students.

Other important findings include:

Over the last two decades, the composition of total student grant aid has shifted, from primarily federal grants to primarily institutional grants. In 1976-77, federal grants accounted for 49% of all student grant aid, institutional grants constituted 34%, and

state grants made up 17%. By 1996-97, state grants remained at approximately the same proportion, 16%, but the other two sources had reversed positions—institutional grants accounted for 53% of the total, while federal grants made up only 31%.

Further, in the last decade, the available evidence suggests that non-need-based aid may be increasing at a faster rate than need-based aid. For example, in 1995-96, non-need-based state grant dollars for undergraduates had increased by almost 11% from the previous year when inflation is considered, whereas need-based grants had decreased by 2%.

Explanation of the Trends

The data indicate that net prices are rising faster than most families' ability to pay. The growing gap between net price and EFC for most families has been affected primarily by trends in the two parts of the net price equation—the average price of attendance and available grant aid.

The total price of attending college has escalated in recent years.

From 1976-77 to 1996-97, the average price of attendance at all institutions increased by 304%. Differences exist by the type of institution: prices increased by 365% at private four-year institutions, 300% at private two-year institutions, 279% at public four-year institutions, and 196% at public two-year institutions.

In comparison, consumer prices increased by about 171% over the same 20-year period. Even when inflation is taken into account, the average price increased by 49% at all institutions—72% at private four-year institutions, 48% at private two-year institutions, 40% at public four-year institutions, and 9% at public two-year institutions.

The average price of attendance also increased faster than median family income over this 20-year period. Between 1977 and 1997, median family income increased by 178%, or only 10% if inflation is considered. This compares to an increase of 304% in the average price of attendance at all institutions between 1976-77 and 1996-97, or 49% when inflation is considered.

Grants, especially at the federal level, have remained static as a proportion of all student aid awarded.

After adjusting for inflation, funding awarded through the primary federal loan programs—the Federal Family Education Loan and Federal Direct Student Loan programs—experienced greater growth than any other source of student aid between 1976-77 and 1996-97. The total loan funds awarded for these programs increased by almost

740%. In comparison, Pell Grant funding grew by only 42% over the same period, while state grants and institutional grants increased by 94% and 227%, respectively. Specially directed aid (including veteran's benefits, social security, and military aid) declined rapidly, by more than 80%.

As a result of these trends in funding, the composition of student financial aid on an aggregate level has shifted. As a proportion of *total* student aid awarded, grants from all sources appeared to maintain approximately the same level, from 34% in 1976-77 to 36% in 1996-97. Meanwhile, loans increased from 18% to 58% of total student aid over this period. The balance is comprised of work-study aid, which decreased from 4% to 1%, and specially directed aid, which decreased dramatically from 43% to 4% of total student aid.

As a proportion of *federal* student aid, federal grants decreased between 1976-77 and 1996-97, from 21% to 16% of total federal aid. Recent years have seen the most rapid decrease, from a highpoint of 27% in 1992-93. Specially directed aid declined from 52% to 6% between 1976-77 and 1996-97, and work-study funds declined from 5% to 2%. At the same time, federal loans increased steadily, from 22% in 1976-77 to 77% in 1996-97.

In the 1990s, the proportion of students receiving loans and the average loan amounts have grown faster than the proportion of students receiving grants and the average grant amounts.

The proportion of undergraduate students receiving grants increased only slightly, from 36% in 1989-90 to 39% in 1995-96, while the proportion receiving loans increased more rapidly, from 19% to 26%. The average amounts received by undergraduates rose at different rates: the average loan amount received increased by 46%, from $2,799 in 1989-90 to $4,074 in 1995-96, whereas the average grant amount received rose by 20%, from $2,257 to $2,716. After adjusting for inflation, the average grant amount actually declined.

Implications and Conclusions

The major trends presented in this report indicate that the capacity of grant aid to improve affordability for students and their families has been diminished in light of rising prices and static funding. The prevalence of large amounts of unmet need—net prices frequently exceed EFCs, especially for students in the lower income categories—suggests that net prices may be rising faster than most families' ability to pay. Higher net prices have meant that parents and their children must seek out alternative sources of assistance, including student loans, other types of consumer borrowing, and even in some cases credit cards. Questions of affordability may be driving students to

change the ways in which they participate in higher education, including working part- or full-time to help finance their education, using distance learning as an alternative to traditional on-campus offerings, and limiting their postsecondary education to public two-year institutions.

The findings outlined in this report suggest that greater financial support for grant aid is needed at all levels. But it is not only the financial support that needs shoring up; the political will of the policymakers who govern the student aid programs at all levels needs to be revived.

- At the federal level, the political will that was behind these programs at their inception has been eroded, chipped away first by budget austerity movements in the 1980s and early 1990s, and now by a push toward smaller government, fewer entitlement programs, and a greater emphasis on individual rather than societal benefits associated with going to college.
- The introduction of federal tax credits for education expenditures—which reward personal investments instead of increasing outright public support on the front end to decrease the price that students and parents pay—provides evidence of the increased focus on the private economic benefits of college.
- At the state level, the rise of non-need-based criteria in awarding aid has infringed upon the amount of need-based aid available, while state budget crunches have pitted education against other important public expenditures, including prisons and Medicaid.
- More institutions may be turning away from need-blind admissions policies—admitting students without regard to their ability to pay—and toward "need-aware" practices. While institutions have made substantial increases in the amount of aid they award, the question remains as to whether colleges and universities should be making up for lags in grant funding from other sources.

The role of grant aid in improving affordability must remain an essential underpinning of student aid programs. Increased support for grants is crucial, but so, too, is the understanding that grants play a superior role in improving college affordability for students at all income levels, and particularly those from the lowest income groups. If future public debates do not focus on the ability of grant aid to enhance affordability, the progress that has been made in increasing access to postsecondary education could be undermined.

Introduction

The late 1990s are a time of unprecedented enthusiasm and opportunity for Americans hoping to pursue a college education. This optimism is reflected in the enrollment decisions of students, the opinions of American citizens, and the actions of policymakers. Consider these examples:

- In the fall of 1998, total enrollment in public and private two-year and four-year colleges is estimated to be nearly 15 million students, an all-time high (NCES, 1998b). In addition, the percentage of high school graduates going to college is at its highest level ever: a recent Bureau of Labor Statistics study showed that a record 67% of 1997 high school graduates enrolled in two- and four-year colleges or universities that fall (BLS, 1998b).
- Public opinion in America strongly supports the importance of going to college. A 1997 poll by Gallup found that 97% of parents with children in their first year of high school agreed that "a college education will enrich the quality of my child's life" (Miller, 1997).
- In the past three years, federal funding to help students pay for college has grown substantially. The establishment of several tax credits for tuition expenditures and saving for education—totaling an estimated $40 billion over five years—combined with the largest increase in federal Pell Grant award maximums in 20 years is helping students and families pay for college.
- After suffering declines in the early 1990s, state level support for higher education is on the upswing. Total state general fund appropriations for higher education—including monies for institutions and student aid—reached a record $26 billion for fiscal 1997-98, up 6% from the previous year (Grapevine, 1998). Furthermore, there has been an influx of new state student aid programs, and more states have established prepaid tuition programs to encourage saving for college.

With these recent signs of progress, it would seem reasonable to conclude that American students and their families now face the best of all worlds. But these signs of optimism mask longer-term trends that could pose serious problems for college access and success in the near future:

- Increases in tuition and fees have outpaced growth in family incomes and inflation, fueling families' concerns that a college education is growing out of their reach.
- Recent polling and focus groups conducted by the American Council on Education found that even though the public believes in the importance of education beyond high school, 71% of the those surveyed feel that four-year colleges are too expensive, a percentage that is even higher among minorities (ACE, 1998).
- Despite the recent improvement in funding for the Pell Grant program, the maximum grant award authorized by Congress has not been fully funded since 1979-80.
- While access to higher education has improved, disparity still exists among students from different family income levels. For example, the percentage of high school students from low-income families who enrolled in college directly after graduation was 26% in 1972, compared to 64% of students from high-income families. Even though low-income enrollment had grown substantially to 49% by 1996, rates for students from high-income families had risen to 78%, still a gap of almost 30 percentage points (NCES, 1998a).

All of these factors indicate that the question of affordability needs to be reexamined. While increases in tuition and decreases in funding for student aid programs have an impact on whether or not individual students and their families can "afford" to pay their share of education costs, it is the overall effect that these trends have on students that matters most. This is particularly true for lower-income students, who have limited personal resources and often do not have access to other private sources of assistance. For them, being able to afford a college education is heavily influenced by the availability of student aid—particularly grant aid.

As this report shows, because funding for grants has not kept pace with prices, the role of grants in improving affordability has become less relevant over time, especially for students attending four-year institutions. Produced by The Institute for Higher Education Policy and The Education Resources Institute (TERI), *Do Grants Matter? Student Grant Aid and College Affordability* chronicles the trends in funding for grants and their impact on families' ability to pay for postsecondary education. Data analyzed in this report span the past two decades and include information from the following sources: the U.S. Department of Education, such as budget information and national data sets maintained by the Department; the College Board, which annually collects data on trends in student aid funding; and other higher education organizations.

Why Grant Aid?

Grants, which do not have to be repaid, represent a public subsidization. Grant aid is used to improve affordability because the benefits of higher education accrue to both individuals and society. This cascade of benefits increases the public policy imperative for more public financing of postsecondary education, particularly in the form of grants.

Much has been made in public policy circles and the higher education community about the growing imbalance between grant aid and loans, as more and more student aid has come in the form of borrowing and not grants. The historical changes in funding of student aid are important, but one facet that has gone largely unnoticed in the war over dollars is the significant difference in the impact that each type of aid has on college affordability. Research indicates that grants appear to be more effective than loans (and work-study), since they tend to encourage greater access, especially for low-income students (Heller, 1998). While student loans are an integral part of a student's aid package, the implications that debt has on students' enrollment, choice of institutions, persistence in college, and career and lifestyle options make them a less attractive option, particularly for many low-income and minority students.

Defining the Issues

For the purposes of the analysis presented in this report, affordability refers to whether the amount of money students and their families actually pay to attend college is within their reach. One way in which affordability can be examined is the net price—the total price of attendance minus all grant aid. Grants are defined as forms of student aid that are non-repayable and are

The public and private benefits of higher education

In describing the public and private benefits of going to college, it may be useful to sort the discussion of benefits into four general categories (The Institute, 1998):

- *Public economic benefits*: Public economic benefits are those benefits for which there can be broad economic, fiscal, or labor market effects. In general, these benefits result in the overall improvement of the national economy, or major segments of the economy, stemming from citizens' participation in higher education. Some of the public economic benefits of higher education include increased tax revenues, greater productivity, increased consumption, and decreased reliance on government financial support.
- *Private economic benefits*: This is the most commonly discussed category of higher education benefits. Private economic benefits are those benefits that have economic, fiscal, or labor market effects on the individuals who have attended postsecondary education. Examples include higher salaries and benefits, higher employment rates, and improved working conditions.
- *Public social benefits*: Public social benefits are benefits that accrue to groups of people or to society broadly, that are not directly related to economic, fiscal, or labor market effects. Examples of such benefits include reduced crime rates, increased charitable giving/ community service, and greater civic participation.
- *Private social benefits*: Private social benefits are benefits that accrue to individuals or groups that are not directly related to economic, fiscal, or labor market effects. Examples of these benefits include improved health/life expectancy, improved quality of life for offspring, and increased personal status.

not tied to service or employment. This includes government-supported need-based grants and private scholarships, but excludes employer aid, assistantships, service programs (such as Americorps), and specially directed aid such as military, veteran, or social security benefits, for which service or employment are required of the recipient.[1] While government subsidies for student loans would meet this definition, calculating the amount of subsidies for all student loans is difficult.[2] Furthermore, loan subsidies do not reduce the price of education, only the amount of interest to be repaid later. Therefore, loan subsidies are not included in the analysis presented in this report.

The focus of this report is largely on need-based grants for undergraduate students. Need is defined as the difference between the price of attending an institution and what families can contribute. Need can reflect the low levels of family resources, the high price of attending a particular institution, or both. While non-need-based aid does defray the price of attendance, it is not intended to address affordability, but rather to reward performance or attract students from certain demographic groups. However, since need-based and non-need-based aid cannot always be separated out in the data—and academic merit is a criteria in some need-based aid, such as state aid—the figures used in this report sometimes include both types of aid.

Furthermore, data reflect expenditures and averages for undergraduates only, except when the undergraduate and graduate levels cannot be separated; in these cases, it is specifically noted in the text. While many public benefits result from graduate level education, affordability is currently a more pertinent issue at the undergraduate level, given the wide societal benefits from undergraduate education, as well as the broader support for public investment in undergraduate education.

Grants may come from various sources:

- At the federal level, the need-based Pell Grant program is the most important and broadly available form of grant support. The Pell Grant is considered the foundation of a student's aid package, after which all other aid awards are determined. Some of the neediest students also receive Supplemental Educational Opportunity Grants (SEOG).
- Each of the 50 states has its own individual grant programs, most of which are need-based. All of the states participate in the State Student Incentive

1 This analysis also excludes the recently enacted tax credits for two reasons: 1) parents and students were able to utilize these credits as of January 1998, but data regarding the amount of credit claimed will not be available until late 1999, when recipients file their tax returns, and after the Internal Revenue Service has compiled this information; and 2) since these credits are awarded after educational expenditures are made—similar to employer aid—their relative impact on improving affordability is limited.

2 Government subsidies are even included in the unsubsidized loan program, where the funds made available to students from the government are at a lower cost than they would carry in the private market.

Grant (SSIG) program, a federal program that provides matching funds for states' support of grant aid, although award levels fluctuate across the country.

- Individual institutions offer grant aid to their students to help defray the price of attendance. Colleges and universities—particularly private institutions—often tie their financial aid decisions to specific enrollment strategies, such as trying to improve diversity or increasing the academic profile of the student body. This aid frequently comes in the form of tuition discounts, which lower the prices that students pay.
- Private organizations, such as charitable foundations and non-profit groups, offer scholarships to students, based on a variety of factors. While private organizations are a common source of aid, it is difficult to measure their total contributions, since no comprehensive source of data on these scholarships exists.

Private-sector grants

Private-sector grants frequently are not included in national data on student aid, due to the difficulty of measuring them. It is sometimes claimed that billions of dollars in private-sector grants exist, much of which goes unused because students do not submit applications. Although it is difficult to accurately measure the volume of private-sector grant aid—figures reported for the total amount vary widely—it is unlikely that the claims of unspent grants are true. Frequently, these assumptions are based on outdated figures or on estimates of available employee tuition benefits (Kantrowitz, 1996).

The consensus figure seems to be that a total of $1.25 billion is awarded to 750,000 undergraduate and graduate students each year, from more than 3,000 private-sector sources (Kantrowitz, 1996). Only 3% of undergraduates received grants from private, outside sources during the 1995-96 academic year, with an average award of $1,561 (NCES, 1996).

Changing Effects of Grant Aid on Affordability

Over the two decades between 1976-77 and 1996-97, the capacity of grant aid to improve the affordability of higher education gradually was eroded, especially for students from low-income families attending four-year institutions. This is evidenced by several key trends, from the relationship between average need-based grant amounts and college prices, to the patterns of the net prices paid by students and their families.

- **Need-based grant awards are covering a decreasing percentage of the average price of attending college.**

Policymakers decide on the aggregate amount of money reserved for need-based grant programs, which in turn determines the size of individual awards. The recipients of such grant awards therefore see their out-of-pocket costs reduced by a specific amount. However, over the last two decades the effectiveness of grant awards in making college more affordable for undergraduates has been falling. This has occurred at the federal, state, and institutional levels.

Federal Pell Grants, for example, reduce the total prices paid for the students who receive them by a maximum possible amount; this maximum is determined by the availability of funds appropriated by Congress. In 1995-96, approximately 22% of undergraduates received Pell Grants (NCES, 1996); for these students, the *actual maximum*[3]

---

3 The *actual* maximum award is the amount determined by the level of appropriations; it is distinct from—and usually lower than—the Congressionally *authorized* maximum.

Pell Grant award they can receive covers a significantly lower proportion of average undergraduate tuition, room, and board at four-year institutions now than it did in the past. In 1976-77, the maximum award of $1,400 covered 35% of the average price of attending a private institution and 72% of the average price of attending a public institution. Since the early 1980s, however, the percentages have declined, falling to 13% for private institutions and 34% for public institutions covered by the average Pell Grant of $2,470 in 1996-97 (College Board, 1997; NCES, 1997). Similar trends hold for the *average* Pell Grant amount received by recipients: in 1976-77, the aver-

Pell Grant Awards as a Share of Average Tuition, Room, and Board

In current dollars

Academic year ending:	Actual maximum Pell Grant award	Percent of private 4-year price of attendance covered	Percent of public 4-year price of attendance covered	Average Pell Grant award (aid per recipient)	Percent of private 4-year price of attendance covered	Percent of public 4-year price of attendance covered
1977	$1,400	35%	72%	$759	19%	39%
1978	$1,400	33%	69%	$758	18%	37%
1979	$1,600	35%	75%	$814	18%	38%
1980	$1,800	36%	77%	$929	19%	40%
1981	$1,750	31%	69%	$882	16%	35%
1982	$1,670	26%	58%	$849	13%	30%
1983	$1,800	25%	56%	$959	13%	30%
1984	$1,800	23%	52%	$1,014	13%	30%
1985	$1,900	22%	52%	$1,111	13%	30%
1986	$2,100	23%	54%	$1,279	14%	33%
1987	$2,100	21%	51%	$1,301	13%	31%
1988	$2,100	20%	48%	$1,303	12%	30%
1989	$2,200	19%	47%	$1,399	12%	30%
1990	$2,300	19%	46%	$1,438	12%	29%
1991	$2,300	17%	44%	$1,449	11%	28%
1992	$2,400	17%	42%	$1,530	11%	27%
1993	$2,400	16%	40%	$1,543	10%	26%
1994	$2,300	14%	36%	$1,506	9%	24%
1995	$2,300	14%	34%	$1,502	9%	23%
1996	$2,340	13%	33%	$1,515	9%	22%
1997	$2,470	13%	34%	$1,577	9%	22%

Note: Average tuition, room and board figures for 1986-87 and later years reflect 20 meals per week rather than meals 7 days per week, and are therefore not entirely comparable with figures for previous years.

Source: College Board, 1997; NCES, 1997; U.S. Department of Education, 1998.

State Grant Aid versus Public Four-Year Price of Attendance

In current dollars

	Average need-based state grant award	Average public 4-year price of attendance	Ratio
1976-77	$590	$1,935	30%
1977-78	$635	$2,038	31%
1978-79	$648	$2,145	30%
1979-80	$676	$2,327	29%
1980-81	$733	$2,550	29%
1981-82	$722	$2,871	25%
1982-83	$767	$3,196	24%
1983-84	$805	$3,433	23%
1984-85	$876	$3,682	24%
1985-86	$947	$3,859	25%
1986-87	$1,018	$4,138	25%
1987-88	$1,068	$4,403	24%
1988-89	$1,092	$4,678	23%
1989-90	$1,161	$4,975	23%
1990-91	$1,198	$5,243	23%
1991-92	$1,264	$5,695	22%
1992-93	$1,297	$6,020	22%
1993-94	$1,382	$6,365	22%
1994-95	$1,575	$6,670	24%
1995-96	$1,560	$7,014	22%

Notes: For 1981-82 and prior years, the number of "enrolled winners" was used to calculate average awards; for 1984-85 to 1993-94, the number of recipients was used; for later years, the number of awards at in-state public institutions, in-state private institutions, and out-of-state institutions were totaled (some states were excluded from the latter due to lack of data). Price of attendance equals tuition, required fees, room, and board.

Source: NASSGAP, various years; NCES, 1997. Historical NASSGAP data were used wherever possible to reflect updates.

age award of $759 covered 19% of the average price at private four-year institutions and 39% at public four-year institutions, whereas in 1996-97, the average award of $1,577 covered 9% and 22%, respectively (College Board, 1997; U.S. Department of Education, 1998).

State policymakers also allocate funding to grant programs. In 1995-96, approximately 10% of undergraduates received need-based state grants (NCES, 1996). For undergraduate recipients, the average awards have been decreasing as a percentage of the average price of attending public four-year institutions. In 1976-77, the average state need-based grant award of $590 covered approximately 30% of average public four-year prices; by 1995-96, this figure had fallen to 22% despite the fact that the average award had risen to $1,560 (NASSGAP, various years; NCES, 1997). Thus, it appears that even as the price of attending a public institution has increased, states have not been able to increase their need-based grant aid enough to prevent an erosion of affordability.[4]

In addition to the federal government and states, institutions provide grants to "needy" undergraduates. These grants are frequently packaged as tuition discounts and effectively decrease the net tuition paid by certain students. In 1995-96, about 12% of undergraduates received need-based institutional grants (NCES, 1996). Although data on longer-term trends are not available, it appears that average institutional grant awards for recipients have remained stable over the last decade as a proportion of the average price of attending four-year institutions. In 1989-90, the average need-based grant of $1,843 covered approximately 15% of the average tuition and fees at private four-year institutions and 37% of the average tuition at public four-year schools. These percentages increased slightly by 1992-93, but fell back to approximately the 1989-90 levels by 1995-96 (NCES, 1990, 1993, 1996, and 1997).

4 Some of the need-based grant aid programs included in the NASSGAP surveys include merit criteria.

Thus, average need-based grant awards are covering a lower percentage of the price of attending higher education institutions than they did 20 years ago. This is particularly true for federal and state grant awards; institutional grants have exhibited comparative stability.

Average Institutional Grant Awards as a Share of Average Price of Attendance for Undergraduates

In current dollars

Academic year ending:	Average institutional need-based grant awards	Average private 4-year price of attendance	Percent of private 4-year price of attendance covered	Average public 4-year price of attendance	Percent of public 4-year price of attendance covered
1990	$1,843	$12,284	15%	$4,975	37%
1993	$2,722	$15,009	18%	$6,020	45%
1996	$2,563	$17,612	15%	$7,014	37%

Note: Average grant amounts are for those who received such aid.

Source: NCES, 1990, 1993, 1996, and 1997.

- **Net prices have increased for most families in the 1990s, further indicating that the role of grant aid in keeping college affordable has been diminished.**

The declining impact of grant aid on affordability additionally can be seen in analyzing patterns in net prices, or *the total price of attendance minus the total grant aid received by an undergraduate student.*[5] Net prices represent the amount families must actually pay for higher education. If the net price of going to a certain institution is greater than a family's resources, then that institution is not affordable for the family--the family must find other resources if they choose to send the student to that institution. The patterns in average net prices presented below include those students who did not receive grant aid.[6] Net prices are categorized by family income and institutional type, and are focused on full-time, dependent undergraduates.[7]

Net prices increased between 1989-90 and 1995-96 for most families. For example, the average net price of attending a public four-year institution for undergraduates with family incomes of $20,000 to $39,999 increased from $6,140 in 1989-90 to $7,829 in 1995-96—an increase of 28%, or 5% when inflation is considered. In general, it appears that net

5 The following analysis uses total grant aid, not just need-based aid. The analysis is based on the methodology developed by the Congressional Budget Office (CBO, 1991), which focuses on how financial aid reduces net price, defined as the student's price of attendance minus the aid the student receives from any source. Only grant aid is used in this report's calculation of net price, in order to examine affordability rather than just access.

6 Thus, their net price is simply equal to the total price of attendance. For comparison purposes, the average EFCs and average prices of attendance generated for this analysis also include zero responses.

7 Students are classified as independent if they meet one or more of the following criteria: age 24 or older; a veteran of the armed forces; married; have legal dependents other than a spouse; enrolled in graduate or professional school; or an orphan or ward of the court. All other students are classified as dependent.

Need-based versus non-need-based aid

Although need-based aid is more relevant to a discussion of affordability—in the sense that it is targeted toward students and families with low incomes and/or high prices of attendance—non-need-based aid has long been a part of the distribution of financial aid to students, especially at the institutional and state government levels. Non-need-based aid may be based on a variety of criteria, including academic merit, athletic talent, or other specific characteristics. Generally, it does not help make college affordable for lower-income students, however, because they are less likely than their higher-income counterparts to receive such aid. For example, more than twice as many dependent undergraduates with family incomes of $60,000 or more received merit-only grants and scholarships in 1995-96 than students with family incomes under $10,000—16%, compared with 7% (NCES, 1996). Nevertheless, in the last decade the available evidence suggests that non-need-based aid may be increasing at a faster rate than need-based aid.

Although recent data are not available, non-need-based grant aid awarded by institutions grew rapidly in the late 1980s. Between 1983-84 and 1991-92, for example, non-need-based aid per freshman had an annual growth rate of 13% when adjusted for inflation. In 1991-92, non-need-based aid accounted for 56% of all institutional aid at public institutions, and 21% at private institutions. However, the average amounts of non-need-based aid per freshman were greater at private institutions (McPherson and Schapiro, 1998).* This growth in non-need-based grant aid may be related to the growing use of such aid for the purposes of enrollment management. Institutions may be trying to bring in students who can pay a portion of tuition, by offering them a discount, rather than paying the entire tuition of the lowest income students. However, evidence to support this assertion is not available.

Many states have non-need-based programs, most of which include merit criteria such as the maintenance of a specific grade point average. In 1995-96, only 14% of the state grant assistance awarded to undergraduates was non-need-based. Since the mid-1980s, however, non-need-based grant funds grew at a more rapid rate than did need-based grants in most years. By 1995-96, non-need-based dollars for undergraduates had increased by almost 11% from the previous year when inflation is considered, whereas need-based grants had decreased by 2% (NASSGAP, various years; see chart on following page). Nonetheless, it is important to recognize that the increase in non-need-based funds was heavily influenced by the actions of only a few states—most important, Georgia's HOPE Grant Program, which was created in 1993.**

In addition to the apparent growth of non-need-based grant aid, policymakers have added merit criteria to their need-based grant programs as a method of rationing the scarce funds available for such grants. Virtually all states now have need-based student aid programs in which recipients must demonstrate merit to be eligible for the program or to continue their participation. Although this is likely happening at the institutional level as well, the motivations of higher education institutions are both more complex and more difficult to examine.

It is clear that, by definition, non-need-based forms of grant aid are not as effective at addressing the affordability gap as need-based grants, which are specifically targeted toward families with "need." The attachment of merit criteria to need-based grants may be further detracting from this mission. Thus, the comparative growth of non-need-based aid and merit criteria provide cause for future concern.

---

* Athletic scholarships were excluded from non-need-based grant dollars in their analysis. In addition, non-need-based aid was calculated per full-time freshman in 1991 dollars, including those that did not receive aid.

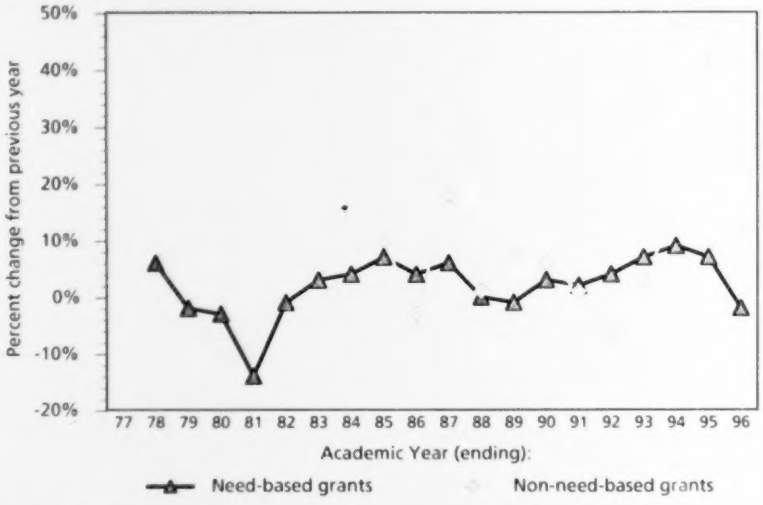
** The HOPE program has both need- and non-need-based components.

prices are rising most rapidly for students from the poorest families (those with incomes under $10,000), at most institutions.[8] However, net prices at public two-year institutions actually decreased for the two lowest income groups. It is also significant that for each type of institution, net prices are still lower for low-income students, again suggesting that grant aid is being targeted toward low-income students (NCES, 1990 and 1996).

In addition, net prices as a proportion of estimated family contributions (EFCs), which to some extent measure family resources, can be examined. When a student applies for financial aid, an EFC is calculated according to a complex formula that takes into account both student and parent income and family size, among other factors. EFC is therefore an estimate of a family's ability to contribute to a student's education.[9] If the net price is less than or equal to the EFC, then a student can attend school without his or her family paying more than need analysis has determined they can pay—i.e., attending is affordable. But, if the net price exceeds the EFC, then a certain amount of unmet need exists for those students and their families, which must be made up with funds that will likely stretch the family's financial resources.

Trends in State Grant Aid for Undergraduates

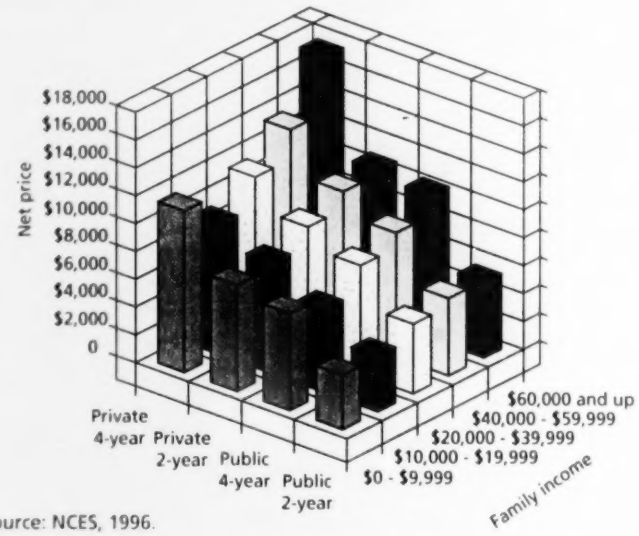
In constant 1996 dollars



Note: Non-need-based grant information was not available prior to 1983-84.

Source: NASSGAP, various years; BLS, 1998a. Historical NASSGAP data were used wherever possible to reflect updates.

Net Prices by Family Income and Institutional Type, 1995-96



Source: NCES, 1996.

8 Surprisingly the slowest growth in net prices appears to have occurred for students with family incomes between $10,000 and $19,999.

9 Students and parents are not required to contribute the amount of their EFC, and do not necessarily do so.

Net Price and EFC Patterns Among Full-time, Dependent Undergraduates

By family income and institutional type

Net price

	1995-96				1989-90			
	Private 4-year	Private 2-year	Public 4-year	Public 2-year	Private 4-year	Private 2-year	Public 4-year	Public 2-year
$0-$9,999	$11,591	$7,593	$6,925	$3,882	$8,178	$5,931	$4,763	$4,043
$10,000-$19,999	$9,333	$7,912	$5,969	$3,944	$8,677	$6,869	$5,346	$4,532
$20,000-$39,999	$11,451	$9,233	$7,829	$4,980	$9,414	$8,066	$6,140	$4,625
$40,000-$59,999	$13,577	$10,489	$8,884	$5,547	$10,937	$8,648	$6,422	$4,827
$60,000 and up	$17,539	$10,717	$10,281	$5,402	$14,319	$9,387	$7,594	$5,163

Net price as percentage of EFC

	Private 4-year	Private 2-year	Public 4-year	Public 2-year	Private 4-year	Private 2-year	Public 4-year	Public 2-year
$0-$9,999	633%	2604%	618%	909%	398%	421%	264%	249%
$10,000-$19,999	1596%	1103%	567%	370%	344%	322%	221%	186%
$20,000-$39,999	478%	387%	312%	177%	200%	209%	130%	97%
$40,000-$59,999	233%	183%	143%	92%	122%	117%	72%	57%
$60,000 and up	95%	66%	59%	36%	71%	66%	43%	36%

EFC as percentage of net price

	Private 4-year	Private 2-year	Public 4-year	Public 2-year	Private 4-year	Private 2-year	Public 4-year	Public 2-year
$0-$9,999	16%	4%	16%	11%	25%	24%	38%	40%
$10,000-$19,999	6%	9%	18%	27%	29%	31%	45%	54%
$20,000-$39,999	21%	26%	32%	56%	50%	48%	77%	103%
$40,000-$59,999	43%	55%	70%	108%	82%	86%	139%	176%
$60,000 and up	105%	151%	170%	282%	141%	153%	231%	278%

Note: Net price equals price of attendance minus all grant aid, including non-need-based aid. Analysis includes all students, including those who do not receive grant aid.

Source: NCES, 1990 and 1996.

Data from 1995-96 indicate that net prices are significantly higher than average EFCs for almost all income categories and institutional types. This was true for all full-time, dependent undergraduates from the lower family income categories (less than $40,000), regardless of the type of institution they attended. For some of these students, average net prices were more than 10 times their average EFCs, signifying considerable unmet need. Only students from the highest income category ($60,000 and up) had net prices that were lower than their average EFCs for all institutional types, meaning that on aver-

age they were paying less than the needs analysis formula had determined they could pay (NCES, 1996).

From the opposite perspective, EFC can be examined as a percentage of net price. This ratio represents an index of the extent to which families' net price of attendance is affordable, on average. In 1995-96, for example, students with family incomes between $20,000 and $39,999 had EFCs that covered 32% of the net price of attending public four-year institutions, on average. Thus, the resources they used to cover the remaining 68% of the net price were greater than the amount they had been expected to contribute. These additional resources most likely were drawn from a combination of sources, including student borrowing, student work income, and additional parent funds. This analysis reveals that, on average, the EFCs of students with lower incomes cover a lower proportion of their average net prices, while the EFCs of students with higher incomes account for a higher proportion of their average net prices, or are even greater than their net prices (NCES, 1996).

This analysis indicates the prevalence of large amounts of unmet need—net prices frequently exceed EFCs, especially for students in the lower income categories. The data suggest that net prices may be rising faster than most families' ability to pay.[10] Thus, it is not surprising that the public perceives the affordability gap to be widening, as the difference between what higher education costs the average family and the grant aid available to them grows.

- **These trends have occurred despite the fact that need-based grant aid continues to be targeted toward students with the most "need."**

The average amount of need-based grant aid received by full-time, dependent undergraduates from all sources—including federal, state, and institutional—varies by family income and institutional type.[11] This variation is based upon both aspects of need: how much the student must pay—the price of attendance—and the level of resources from which the student can draw. The differences are reflected in the proportions of average prices that are covered by average grant amounts.

10 This analysis does not take into account the trends faced by independent and part-time students, who comprise an increasing proportion of the student population. However, it is likely that they face similar financial pressures. In fact, rising net prices may be one of the reasons this group is growing, as more students choose to delay entry or attend postsecondary institutions on a part-time basis.

11 The analysis focuses on full-time, dependent undergraduates who receive grant aid because of the difficulty in taking into account the variation in awards and prices that is due to the attendance and work patterns of independent and part-time students.

Average Grant Aid Received Compared to Average Price of Attendance, 1995-96

By family income and institutional type

	Average price of attendance	Average need-based grant aid	Ratio of grant aid to average price of attendance
PUBLIC 4-YEAR			
Dependent, full-time students	*$9,973*	*$2,684*	*27%*
$0-$9,999	$9,532	$3,556	37%
$10,000-$19,999	$9,088	$3,686	41%
$20,000-$39,999	$9,619	$2,513	26%
$40,000-$59,999	$9,754	$1,849	19%
$60,000 and up	$10,559	$1,812	17%
PRIVATE 4-YEAR			
Dependent, full-time students	*$19,562*	*$5,763*	*29%*
$0-$9,999	$16,629	$5,891	35%
$10,000-$19,999	$17,191	$6,892	40%
$20,000-$39,999	$18,325	$6,585	36%
$40,000-$59,999	$19,307	$5,831	30%
$60,000 and up	$21,199	$4,367	21%
PUBLIC 2-YEAR			
Dependent, full-time students	*$5,658*	*$1,705*	*30%*
$0-$9,999	$5,438	$2,212	41%
$10,000-$19,999	$5,504	$2,013	37%
$20,000-$39,999	$5,724	$1,560	27%
$40,000-$59,999	$5,701	$1,000	18%
$60,000 and up	$5,677	n.a.	n.a.
PRIVATE 2-YEAR			
Dependent, full-time students	*$10,357*	*$1,956*	*19%*
$0-$9,999	$8,648	$2,044	24%
$10,000-$19,999	$9,671	$2,048	21%
$20,000-$39,999	$10,288	$1,917	19%
$40,000-$59,999	$11,218	$1,712	15%
$60,000 and up	$11,496	$1,580	14%

Note: Average grant aid amounts are for those who received such aid.

Source: NCES, 1996.

- In 1995-96, average need-based grant aid amounts tended to be highest at private four-year institutions and lowest at public two-year institutions, reflecting the price aspect of need analysis calculations—in general, more grant aid is being awarded to students who have greater need because they attend more expensive institutions. However, the variation in average price by institutional type tends to compensate for the differing grant amounts. As a result, average need-based grants covered similar proportions of the average price of attendance across most institutional types: 30% at public two-year institutions, 29% at private four-year institutions, and 27% at public four-year institutions. Private two-year institutions, such as proprietary schools, are the exception to this pattern; despite high average tuition levels, average grant amounts are relatively low, covering only 19% of the price of attendance on average (NCES, 1996).

- Within each institutional type, average need-based grant amounts tend to vary inversely with family income: the lower the income level, the higher the average award amount. Thus, grant aid also appears to be targeted to students from lower-income backgrounds—the other aspect of need.[12] This pattern can be seen further in the ratios of grant amounts to prices. In general, average grant aid awards

12 While it may seem counterintuitive, it is possible for higher-income students to have a greater proportion of their price of attendance covered by grant aid at a higher priced institution than lower-income

received by full-time, dependent undergraduates covered a larger proportion of total price of attendance for lower-income students than for higher-income students. For example, at public four-year institutions, average grant amounts covered 37% of the average price of attendance for students with family incomes less than $10,000, but covered 17% for those with family incomes of $60,000 or more (NCES, 1996).

The above analysis shows that, even as average grant awards decline relative to price of attendance, need-based grants continue to be targeted largely toward the students with the most need—due to low family resources or high price of attendance.

student at lower-priced institutions. This is possible due to need analysis calculations, which take into account family resources *and* price of attendance. For example, average grant aid to students with incomes of $40,000 to $59,999 covered 30% of the average price of attending a private four-year institution, while average grant aid to students with incomes less than $10,000 covered 24% of the average price of attending a private two-year institution.

What Explains These Trends?

The gradual erosion of grant aid's impact on affordability has resulted from a combination of factors. In particular, the growing gap between net price and EFC for most families has been affected primarily by trends in net price. Both parts of the net price equation—the average price of attendance and available grant aid—are significant in this respect. Perhaps most important, the average price of attendance has increased more rapidly than have both inflation and median family incomes. Furthermore, average grant amounts have failed to match the growth in average prices, as well as inflation in certain cases. For example, although the average Pell Grant award doubled between 1976-77 and 1996-97, after inflation is taken into account it actually decreased by more than 23% over this period (U.S. Department of Education, 1998; BLS, 1998a). Ultimately, average prices have clearly risen faster than have average grant amounts, causing net prices to rise.

In order to examine the failure of increases in grant awards to match increases in college prices in more detail, several aspects are highlighted below: college prices have increased dramatically; federal government policymakers have not chosen to increase grant aid as a proportion of total federal aid; and the proportion of undergraduates using loans has increased faster than those receiving grants.

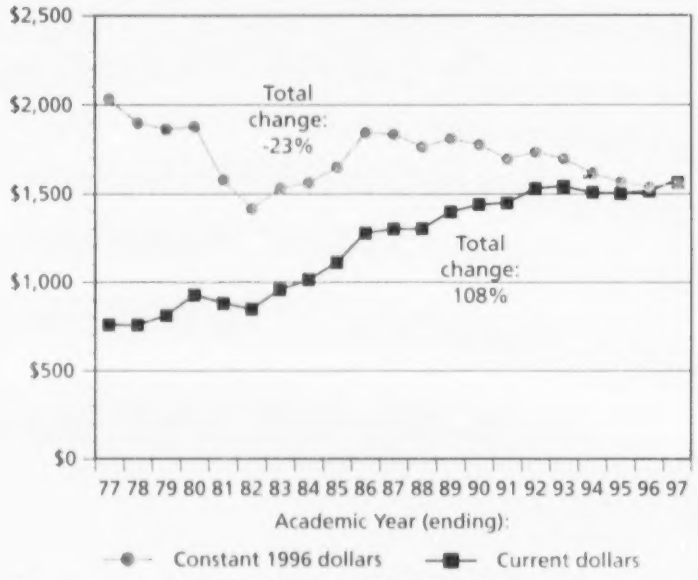
- **The total price of attending college has escalated in recent years.**

Net prices have been affected by substantial increases in the total price of attending college, defined as the average levels of tuition, fees, room, and board for undergraduates. Total prices have increased rapidly, especially in comparison with inflation and median family incomes. From 1976-77 to 1996-97, the average price of attendance at all institutions increased by 304%. Differences exist by the type of institution: 365% at private four-year institutions, 300% at private two-year institutions, 279% at public four-year institutions, and 196% at public two-year institutions (NCES, 1997).

In comparison, consumer prices[13] increased by about 171% over the same 20-year period. Even when inflation is taken into account, the average price of attendance increased considerably: 49% at all institutions, 72% at private four-year institutions, 48% at private two-year institutions, 40% at public four-year institutions, and 9% at public two-year institutions (NCES, 1997; BLS, 1998a). Only public two-year schools such as community colleges raised their prices of attendance at close to the same rate as inflation.

The average price of attendance also increased faster than median family income over this 20-year period. Between 1977 and 1997, median family income increased by 178%, and by only 10% if inflation is considered. This compares to an increase of 304% in the average price of attendance at all institutions between 1976-77 and 1996-97, or 49% when inflation is considered. As a result, while the average price of attendance for the 1976-77 academic year accounted for 14% of the median family income in 1977, the average price in 1996-97 took up 21% of median family income in 1997 (U.S. Census Bureau, 1998; NCES, 1997).

Average Pell Grant Awards (aid per recipient)



Source: U.S. Department of Education, 1998; BLS, 1998a

Average Undergraduate Tuition, Fees, Room, and Board Charges

Current dollars:

	All institutions	Private 4-year	Public 4-year	Public 2-year	Private 2-year
1976-77	*$2,275*	$3,977	$1,935	$1,491	$2,971
1986-87	*$5,206*	$10,039	$4,138	$2,989	$6,384
1996-97	*$9,199*	$18,476	$7,331	$4,412	$11,889
Total increase:	*304%*	365%	279%	196%	300%

Constant 1996 dollars:

	All institutions	Private 4 year	Public 4-year	Public 2-year	Private 2-year
1976-77	*$6,081*	$10,630	$5,172	$3,985	$7,941
1986-87	*$7,340*	$14,165	$5,839	$4,217	$9,008
1996-97	*$9,083*	$18,243	$7,239	$4,356	$11,739
Total increase:	*49%*	72%	40%	9%	48%

Source: NCES, 1997; BLS, 1998a.

13 Measured according to the Consumer Price Index (CPI-U, 1982-84 = 100), Bureau of Labor Statistics.

Median Family Income Compared to Average Price of Attendance

In current dollars

Year/ academic year ending	Median family income	Price of attendance, all institutions	Ratio, total price to family income
1977	$16,009	$2,275	14%
1978	$17,640	$2,411	14%
1979	$19,587	$2,587	13%
1980	$21,023	$2,809	13%
1981	$22,388	$3,101	14%
1982	$23,433	$3,489	15%
1983	$24,580	$3,877	16%
1984	$26,433	$4,167	16%
1985	$27,735	$4,563	16%
1986	$29,458	$4,885	17%
1987	$30,970	$5,206	17%
1988	$32,191	$5,494	17%
1989	$34,213	$5,869	17%
1990	$35,353	$6,207	18%
1991	$35,939	$6,562	18%
1992	$36,573	$7,074	19%
1993	$36,959	$7,452	20%
1994	$38,782	$7,931	20%
1995	$40,611	$8,306	20%
1996	$42,300	$8,800	21%
1997	$44,568	$9,199	21%
Total increase:	178%	304%	
Total increase, adjusted for inflation:	10%	49%	

Source: NCES, 1997; U.S. Census Bureau, 1998

- **Grants, especially at the federal level, have remained static as a proportion of all student aid awarded.**

Rapidly escalating college prices appear to have accounted for much of the growth in net prices in recent years. However, trends in grant aid funding have had an impact as well. For example, even if the average undergraduate price of attendance for all institutions had increased at the same rate as inflation between 1976-77 and 1996-97, the proportion covered by the average Pell Grant award would still have decreased from 33% to 26% (NCES, 1997; BLS, 1998a; U.S. Department of Education, 1998).

Funding for most types of student financial aid has increased over the past two decades, but at differing rates. Funding for loans has increased much more rapidly than funding for grants, especially in recent years. Loans, rather than grants, have compensated for the rapid decline in funding for specially directed aid, such as GI Bill benefits. The trends in funding have affected the composition of total student aid awarded, as well as the composition of federal student aid in particular.[14]

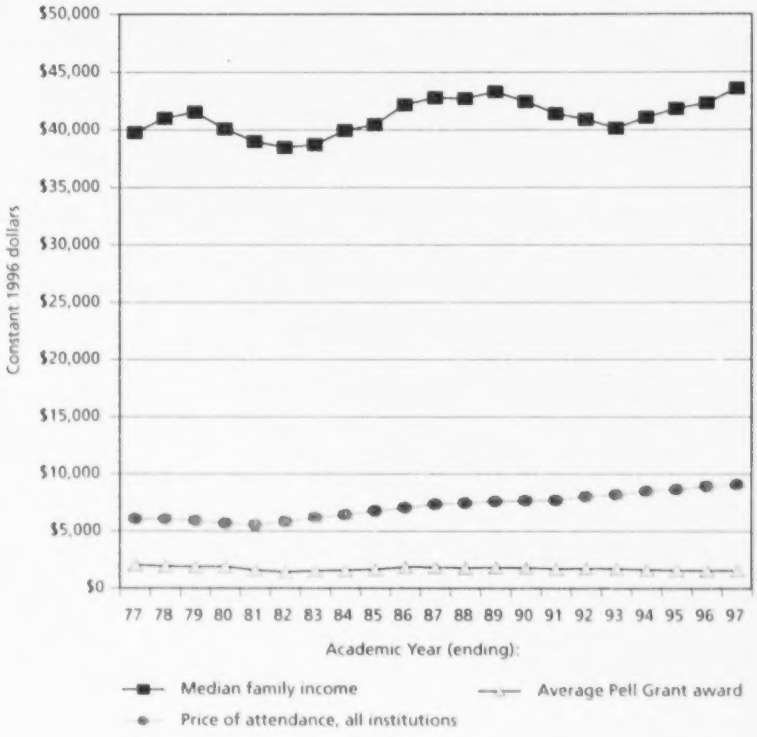
After adjusting for inflation, funding awarded through the primary federal loan programs—the Federal Family Education Loan and Federal Direct Student Loan programs—experienced greater growth than any other source of student aid between 1976-77 and 1996-97—the total loan funds awarded for these programs increased by almost 740%. In comparison, Pell Grant funding grew by only 42% over the same period, while state grants and institutional grants increased by 94% and 227%, respectively. On the other hand, specially directed aid (including veteran's benefits, social security, and military aid), which came primarily in the form of non-repayable "benefits," declined

14 Aggregate funding includes aid awarded to both undergraduates and graduate students; the data cannot be disaggregated. In addition, non-need-based aid cannot be separated from need-based aid in most cases—in particular for state and institutional awards (College Board, 1997).

rapidly—funds decreased by more than 80% (College Board, 1997). By 1996-97, total funding stood at almost $6 billion for Pell Grants, $3 billion for state grants, and nearly $11 billion for institutional grants, compared to $30 billion for federal loans, and only $2 billion for specially directed aid.[15]

As a result of these trends in funding, the composition of student financial aid on an aggregate level has shifted. As a proportion of *total* student aid, grants from all sources appeared to maintain approximately the same level, from 34% in 1976-77 to 36% in 1996-97, with a high point of 46% in 1992-93. Meanwhile, loans increased from 18% to 58% of total student aid over this period. The balance is comprised of work-study aid, which decreased from 4% to 1%, and specially directed aid, which decreased dramatically from 43% to 4% of total student aid (College Board, 1997).

Median Family Income, Average Price of Attendance, and Average Pell Grant Awards



Source: U.S. Census Bureau, 1998; U.S. Department of Education, 1998; NCES, 1997; BLS, 1998a.

As a proportion of *federal* student aid, federal grants decreased between 1976-77 and 1996-97, from 21% to 16% of total federal aid. Recent years have seen the most rapid decrease, from a highpoint of 27% in 1992-93. Specially directed aid declined from 52% to 6%, and work-study funds declined from 5% to 2%. At the same time, federal loans have increased steadily, from 22% in 1976-77 to 77% in 1996-97 (College Board, 1997). Much of the growth in federal loans has occurred since 1993, reflecting changes in loan programs that occurred as a result of the 1992 reauthorization of the Higher Education Act, including the creation of the Stafford unsubsidized loan program and the increase of loan limits.

15 The percentage increases are expressed in constant dollars, while the 1996-97 dollar figures are expressed in current dollars.

Shifts in sources of grant aid

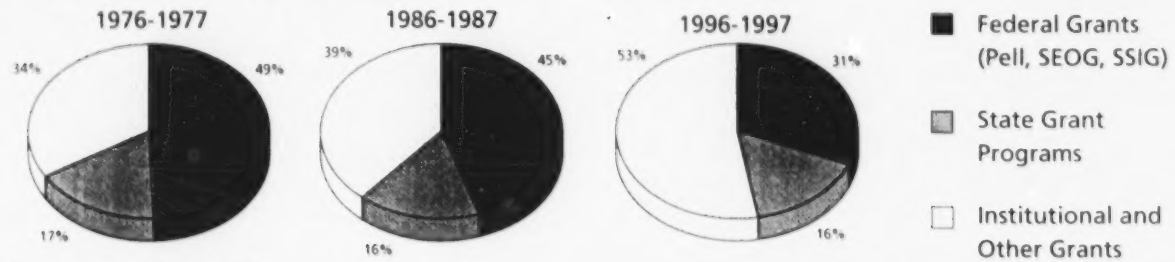
From the student's perspective, the source of grant aid is not relevant to the affordability issue—grants decrease the net price they pay, regardless of the source. However, changes in the source of grant aid are important as they point to shifts in the burden of who is ensuring affordability: governments (the public) or institutions (which can be private or public). Over the last two decades, the composition of total student grant aid has shifted, from primarily federal grants to primarily institutional grants.

Between 1976-77 and 1996-97 funding for institutional grants awarded to all students grew significantly faster than funding for state grants or federal Pell Grants, 227% compared to 94% and 42%, respectively, after adjusting for inflation. As a result, the sources of total grant aid funding changed. In 1976-77, federal grants—including Pell Grants, Supplemental Educational Opportunity Grants (SEOG), the federal share of State Student Incentive Grants (SSIG), and other federal grants—accounted for 49% of all student grant aid; institutional grants constituted 34%, and state grants made up 17%. By 1996-97, state grants remained at approximately the same proportion, 16%, but the other two sources had reversed positions—institutional grants accounted for 53% of the total, while federal grants made up only 31% (College Board, 1997).

This reversal also can be seen from the student perspective. The overall proportion of undergraduates receiving grants has increased only slightly in the last decade and the average grant amounts received have actually declined when inflation is considered; this is particularly evident in the case of federal grants. The overall trends still are true for state grants—the percentage of students receiving them has remained the same at 11%, while the average amounts have increased only slightly, from $1,183 in 1989-90 to $1,571 in 1995-96. On the other hand, although the proportion of undergraduates receiving institutional grant awards has remained approximately the same—13% in 1989-90 compared to 14% in 1995-96—the average amount received has increased significantly. Between 1989-90 and 1995-96, average institutional grants grew from $2,029 to $2,943, an increase of 45%, or 19% when inflation is considered (NCES, 1990 and 1996).

This shift from federal to institutional grants is likely the result of two forces: the relatively slow growth of funding for federal Pell Grants, and the increasing use of institutional aid by both public and private institutions. Most institutions now use financial aid as a tool to manage their revenue and enrollment, especially private four-year institutions (McPherson and Schapiro, 1998). Under "need-blind, full-need" admission policies, for example, private institutions apply external financial aid to the fullest extent possible, then meet remaining student need with institutional grants and loans (Hubbell, 1992). For some public institutions the "high tuition/high aid" model has involved raising tuition and fees closer to full-cost levels and establishing an expanded program of need-based grants or targeted tuition discounts with the additional revenue.

Student Grant Aid by Source

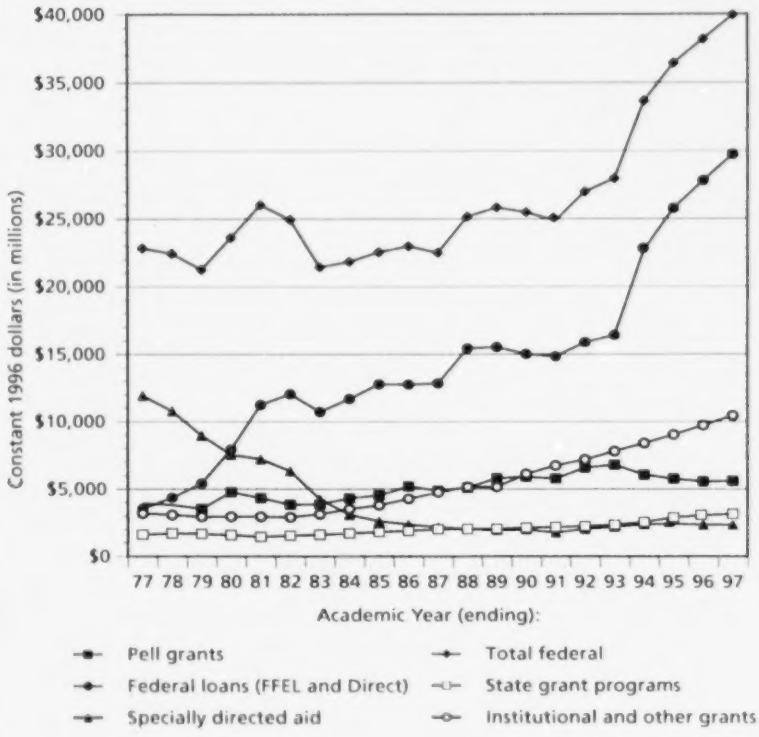


Source: College Board, 1997.

Thus, differing trends in funding have caused a considerable shift in the composition of aid awarded to students. Specially directed aid—which is similar to grant aid in that it does not need to be repaid, but which has specific conditions attached to it, such as military service—decreased rapidly as a proportion of all aid. The gap was filled by rapid increases in student loans, and by growth in institutional grant aid to a certain extent. Grant aid as a whole remained relatively stable.

- **In the 1990s, the proportion of students receiving loans and the average loan amounts have grown faster than the proportion of students receiving grants and the average grant amounts.**

Aid Awarded to Postsecondary Students



Notes: 1995-96 data are estimates; 1996-1997 data are preliminary. Federal loans include Ford Direct Loans and Family Education Loans (Stafford, PLUS, SLS); prior to 1986-87, federal loans are Guaranteed Loans (FFELP)

Source: College Board, 1997.

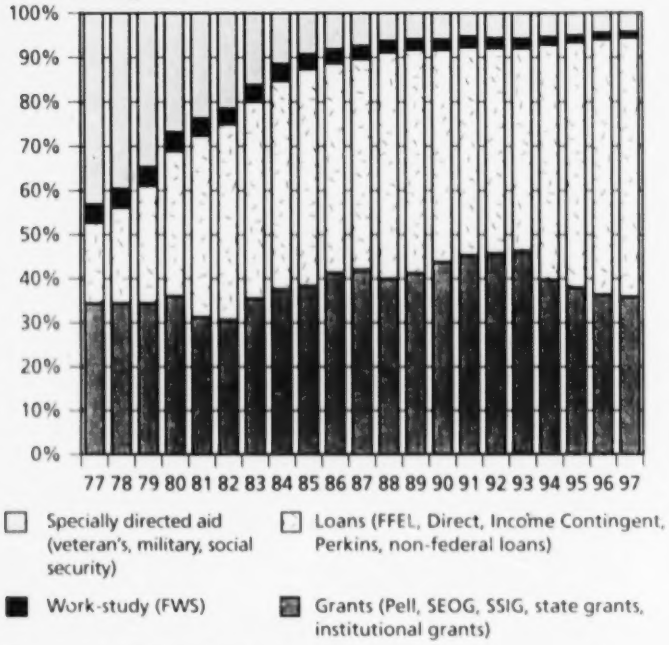
For the 1995-96 academic year, it was still true that more undergraduate students received grants than received loans—39% versus 26%. Nevertheless, accompanying the relative stagnation of funding for grants has been a stagnation in the proportion of students receiving grants, especially in comparison with the proportion of students receiving loans. The proportion receiving grants increased only slightly, from 36% in 1989-90 to 39% in 1995-96, while the proportion receiving loans increased more rapidly, from 19% to 26% (NCES, 1990 and 1996).

At the same time, the average amounts received by undergraduates rose at different rates: the average loan amount received increased by 46%, from $2,799 in 1989-90 to $4,074 in 1995-96, whereas the average grant amount received rose by 20%, from $2,257 to $2,716 (NCES, 1990 and 1996). After adjusting for inflation, the average grant amount actually declined.

These trends are especially salient for federal aid. In fact, fewer undergraduates received federal grants than loans in 1995-96—22% compared to 25%. This resulted

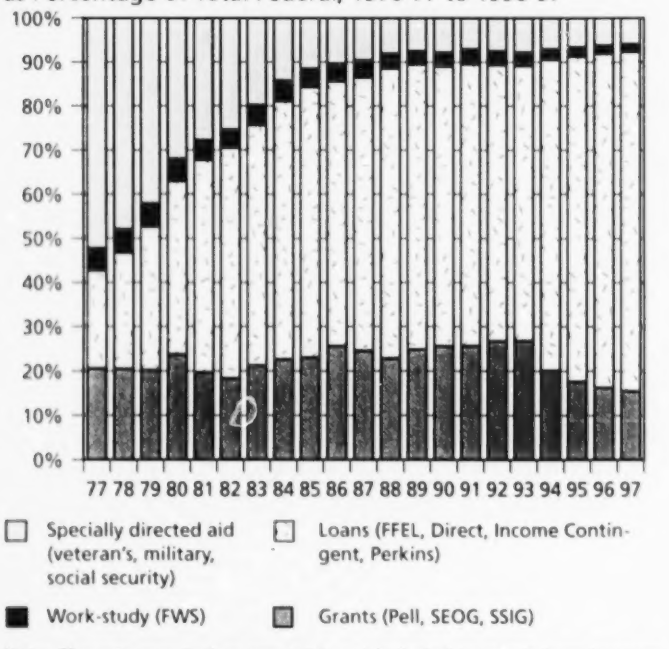
Type of Student Aid

as Percentage of Total, 1976-77 to 1996-97



Type of Federal Student Aid

as Percentage of Total Federal, 1976-77 to 1996-97



Note: The category "other grants" is not included in grants here because they fall under specially directed aid.

Source: College Board, 1997.

from a significant increase in the proportion of students receiving loans; while the proportion of students receiving grants remained at about the same level, the proportion receiving loans increased by 7 percentage points, from 18% in 1989-90. The average amount of federal loans received rose from $2,642 to $4,041, while average federal grants increased only slightly—from $1,544 to $1,668—and declined when inflation is considered (NCES, 1990 and 1996).

Grant aid therefore appears to have remained static from the point of view of the student as well as the funding perspective: the proportion of undergraduates receiving grants has remained about the same in the 1990s, and the amount they receive has been declining when considering inflation. At the same time, it appears that an increasing number of students are using student loans, and they are taking out growing amounts. These loans may be at least partially filling the increasing gaps between net prices and EFCs.

Student Aid to Undergraduates, 1995-96 and 1989-90

Percent of students receiving, and average amounts for those who received aid

TOTAL (all sources)	Total aid	Total grant	Total merit-only grants	Total need-based grants	Total loan*	Total work-study
96: % of students	50%	39%	5%	33%	26%	5%
96: Average amount	$4,926	$2,716	$2,899	$2,636	$4,074	$1,397
Constant 1996 dollars	*$5,003*	*$2,759*	*$2,944*	*$2,677*	*$4,138*	*$1,419*
90: % of students	43%	36%	n.a.	n.a.	19%	4%
90: Average amount	$3,605	$2,257	n.a.	n.a.	$2,799	$1,058
Constant 1996 dollars	*$4,453*	*$2,788*	*n.a.*	*n.a.*	*$3,458*	*$1,307*

FEDERAL:	Total aid**	Total grant	Pell grant	SEOG	Total loan*
96: % of students	37%	22%	22%	5%	25%
96: Average amount	$4,475	$1,668	$1,510	$681	$4,041
Constant 1996 dollars	*$4,544*	*$1,694*	*$1,534*	*$692*	*$4,103*
90: % of students	18%	21%	20%	5%	18%
90: Average amount	$2,642	$1,544	$1,435	$641	$2,642
Constant 1996 dollars	$3,264	$1,908	$1,773	$792	$3,264

STATE:	Total aid	Total grant	Need-based grant	Non-need-based grant	Total loan
96: % of students	11%	11%	10%	1%	<1%
96: Average amount	$1,647	$1,571	$1,526	$1,484	$3,162
Constant 1996 dollars	*$1,673*	*$1,595*	*$1,550*	*$1,508*	*$3,212*
90: % of students	13%	11%	7%	1%	1%
90: Average amount	$1,320	$1,183	$1,258	$1,058	$2,348
Constant 1996 dollars	*$1,631*	*$1,462*	*$1,555*	*$1,307*	*$2,901*

INSTITUTIONAL:	Total aid	Total grant	Need-based grant	Non-need-based grant	Total loan
96: % of students	16%	14%	12%	3%	1%
96: Average amount	$2,928	$2,943	$2,563	$3,369	$1,465
Constant 1996 dollars	*$2,974*	*$2,989*	*$2,603*	*$3,422*	*$1,488*
90: % of students	15%	13%	7%	3%	1%
90: Average amount	$2,048	$2,029	$1,843	$1,589	$1,299
Constant 1996 dollars	*$2,530*	*$2,506*	*$2,277*	*$1,963*	*$1,605*

PRIVATE:	Grants
96: % of students	3%
Average amount	$1,561
Constant 1996 dollars	*$1,585*
90: % of students	n.a.
Average amount	n.a.
Constant 1996 dollars	n.a.

* except PLUS
** including military and veteran benefits

Source: NCES, 1990 and 1996; BLS, 1998a.

Implications and Conclusions

The major trends presented in this report indicate that the capacity of grant aid to improve affordability for students and their families has been diminished in light of rising prices and static funding. Average grant awards have been covering a decreasing percentage of the average price of attending college over the past two decades, at four-year institutions in particular. Meanwhile, in the 1990s, the proportion of students receiving grants and the average grant amounts has grown more slowly than the proportion of students receiving loans and the average loan amounts.

These changes in the role of grant aid have had an impact on the overall process of financing a college education. The broader availability of student loans, combined with increases in borrowing levels, has expanded their importance in paying for postsecondary education. Furthermore, higher net prices have meant that parents and their children must seek out alternative sources of assistance beyond student loans, such as private loans, other types of consumer borrowing, and even in some cases credit cards. But despite the use of these sources by students and parents, these options have not contributed to affordability in the same way as more grant aid would have.

Questions of affordability may be driving students to change the ways in which they participate in higher education. Increasing proportions of students appear to be working part- or full-time to help finance their education, as illustrated by the growing number of older, non-traditional students. The rising popularity of distance learning may be caused in part by students needing to find alternatives to the traditional on-campus offerings as they balance the need for education with other financial considerations. In addition, disadvantaged students increasingly may be limiting their postsecondary education to public two-year institutions, where taxpayer subsidies appear to have prevented net prices from increasing as rapidly as at four-year institutions.

The findings outlined in this report suggest that greater financial support for grant aid is needed at all levels. The necessity of increased funding is particularly poignant when the changes in the composition and funding levels of financial aid are examined within the context of the significant increases in college enrollment—and in the numbers of financial aid recipients—that have occurred over the last 20 years. But it is not only the financial support that needs shoring up; the political will of the policymakers who govern the student aid programs at all levels needs to be revived. Over the past two decades, efforts to keep college affordable have been undermined by failings on both sides of the equation: prices have not been kept low, and grant aid has stagnated or declined. The lack of the political will necessary to make meaningful increases in grant funding—increases that match the growth in prices—has negatively impacted access and affordability for most families.

- At the federal level, the political will that was behind these programs at their inception has been eroded, chipped away first by budget austerity movements in the 1980s and early 1990s, and now by a push toward smaller government, fewer entitlements, and greater individual responsibility. In combination with this focus on budget issues, most improvements in the student aid system have been focused on loans—increasing loan limits, providing more access to loan funds, and changing the delivery system. This has been accompanied in the higher education policy field by an increasing focus on the private economic benefits of college, which implies continued reliance on loans rather than grants.
- The introduction of federal tax credits for education expenditures provides further evidence of this change in focus. Not only do tax credits reward personal investments instead of increasing outright public support on the front end to decrease the price that students and parents pay, but also they are targeted towards middle- and upper-income families, who more frequently use the tax code than do lower-income families. With net prices rising the fastest for the families who have the fewest resources, a tax credit that will be received long after any contributions towards the price of attending college does not impact significantly affordability.
- At the state level, the rise of non-need-based criteria in awarding aid—often based on state workforce and economic needs, such as teaching or health care—has infringed upon the amount of need-based aid available. State budget crunches have pitted education against other important public expenditures, including prisons and Medicaid. The popularity of such programs as the HOPE Scholarship in Georgia, in which merit is a criteria for eligibility and continuation, has spurred several states to start similar programs.
- Even at the institutional level, more institutions may be turning away from need-blind admissions policies—admitting students without regard to their ability to

pay—and toward "need-aware" practices, in light of the economic realities that many colleges and universities face. While institutions have made substantial increases in the amount of aid they award, the question remains as to whether colleges and universities should be making up for lags in grant funding from other sources, particularly given the pressure they are under to rein in the costs of educating students and the prices they charge.

The role of grant aid in improving affordability must remain an essential underpinning of student aid programs. Increased support for grants is crucial. But so, too, is the understanding that grants play a superior role in improving college affordability for students at all income levels, and particularly those from the lowest income groups. An increasing desire to help middle-income students through tax-credits or other methods is worthwhile, but it should not come at the expense of low-income students and their families. If future public debates do not focus on the ability of grant aid to enhance affordability, the progress that has been made in increasing access to postsecondary education over the last three decades could be undermined.

References

ACE. See: American Council on Education.

American Council on Education (ACE). 1998. *Too Little Knowledge Is a Dangerous Thing*. Washington, DC: American Council on Education.

BLS. See: Bureau of Labor Statistics.

CBO. See: U.S. Congressional Budget Office.

College Board. 1997. "Trends in Student Aid 1987-97." Washington, DC: College Board, September.

Grapevine. 1998. *State Higher Education Appropriations 1997-98*. Fifty State Summary Table. From Grapevine website (http://coe.ilstu.edu/grapevine).

Heller, Donald E. 1997. "Student Price Response in Higher Education: An Update to Leslie and Brinkman." *The Journal of Higher Education.* Vol. 68, No. 6 (November/December), pp. 624-659.

Hubbell, Loren Loomis. 1992. "Tuition Discounting: The Impact of Institutionally Funded Financial Aid." Washington, DC: National Association of College and University Business Officers (NACUBO).

Kantrowitz, Mark. 1996. "Financial Aid Information Page Debunks the '$6.6 Billion in Unclaimed Aid' Myth." Financial Aid Information Page (www.finaid.org/finaid/pr). August 15.

McPherson, Michael S. and Morton Owen Schapiro. 1998. *The Student Aid Game: Meeting Need and Rewarding Talent in American Higher Education.* Princeton, NJ: Princeton University Press.

Miller, Elizabeth I. 1997. "Parents' Views on the Value of a College Education and How They Will Pay for It." *Journal of Student Financial Aid.* Vol. 27, No. 1, pp. 7- 20.

NASSGAP. See: National Association of State Scholarship and Grant Programs.

National Association of State Scholarship and Grant Aid Programs (NASSGAP). Various years. *NASSGAP Annual Survey Report.* (1997) Harrisburg: Pennsylvania Higher Education Assistance Agency. (1996 and prior years) Albany, NY: New York State Higher Education Services Corporation.

National Commission on the Cost of Higher Education. 1998. *Straight Talk About College Costs and Prices.* Washington, DC: Oryx Press, January.

NCES. See: U.S. Department of Education. National Center for Education Statistics.

The Institute for Higher Education Policy. 1998. *Reaping the Benefits: Defining the Public and Private Value of Going to College.* Report prepared for the New Millennium Project on Higher Education Costs, Pricing, and Productivity. Washington, DC: The Institute for Higher Education Policy, March.

U.S. Bureau of Labor Statistics (BLS). 1998a. Consumer Price Index-All Urban Consumers. Base period: 1982-84 = 100. From BLS website (www.bls.gov).

_____. 1998b. "College Enrollment and Work Activity of 1997 High School Graduates." Supplement to Current Population Survey, 1997. From BLS website (www.bls.gov).

U.S. Census Bureau. 1998. "Regions—Families (All Races) by Median and Mean Income: 1953 to 1997." *March Current Population Survey.* Table F-6. From Census Bureau website (www.census.gov).

U.S. Congressional Budget Office (CBO). 1991. *Student Aid and the Cost of Postsecondary Education.* Washington, DC: Government Printing Office, January.

U.S. Department of Education. 1998. *Title IV Federal Pell Grant Program, End of Year Report 1996-97.* Washington, DC: U.S. Department of Education.

U.S. Department of Education. National Center for Education Statistics (NCES). 1990. National Postsecondary Student Aid Study, 1990 (NPSAS:90). Data Analysis System.

_____. 1993. National Postsecondary Student Aid Study, 1993 (NPSAS:93). Data Analysis System.

_____. 1996. National Postsecondary Student Aid Study, 1996 (NPSAS:96). Data Analysis System.

_____. 1997. *Digest of Education Statistics 1997.* Washington, DC: Government Printing Office.

_____. 1998a. *Condition of Education 1998.* Washington, DC: Government Printing Office.

_____. 1998b. *Projections of Education Statistics.* Washington, DC: Government Printing Office.